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Promote, advance, and have fun with amateur radio in our community



W7LT.org

2025 3rd Quarter

What a summer and early fall it's been! From picnics in the park to GHz experiments on the Columbia River, PARC members continue to show just how wide and wonderful this hobby can be. We've stretched wire, launched signals, and stretched our appetites at more than one cookout.

One standout was our POTA Party at Rooster Rock: three stations, four parks, plenty of food, and great fellowship. Add in the incredible GHz TV demo, and I think a few of us left dreaming of new gear.

Our work at the Hood Hundred race and the OMSI Science Festival was another reminder that amateur radio isn't just about personal contacts—it's about service, education, and opening doors for the next generation. Whether keeping runners safe on Mt. Hood or helping a visitor send their first name in Morse code to the Blueback submarine, every key tap and mic click can make a difference.

Looking ahead, DX season is here, a balloon launch may be in the works, and fall meetings promise more learning and camaraderie. As always, bring your curiosity, your questions, and maybe a cookie or two to share.

See you at the next meeting—or better yet, let's work each other on the bands!

73, Dan Presley, N7CQR

President, Portland Amateur Radio Club

PARC August Picnic Recap



On Monday, August 11, the Portland Amateur Radio Club gathered at Woodstock Park for the annual picnic and August meeting. About 40 attendees—members, spouses, and friends—came out for a relaxed evening of radio talk, food, and hands-on tinkering.

Jim K8SAT brought an Elecraft KH1 that he had just received that afternoon. He let several operators help with the unboxing and even play with his new toy, including Dan N7CQR who has a lot of experience with this incredible portable CW transceiver. Max K7MAX was busy recruiting radio operator volunteers for the annual Hood One Hundred race event.

Ken AI7LF and his wife, Jan, kept everyone fed with hamburgers and hot dogs. Thank you to everyone who brought a side dish to share—the potluck table was a hit and ensured nobody left hungry.

Radio fun was very much on the menu. Members brought HTs and directional antennas to hunt a few hidden “foxes” around the park courtesy of Denny WB&UFJ, trading tips on attenuation, body and tree shielding, and signal nulls as they closed in on transmitters. An Anderson Powerpole station was available for folks in need of fresh connectors and clean-up of field cables.



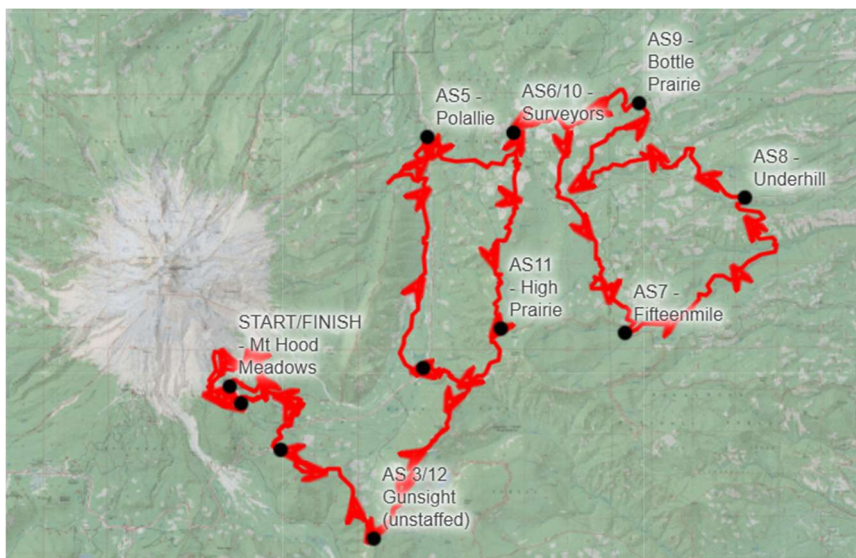
PARC Picnic Log

Nick	KI7PTT	Joy	--	Dave	W7AQK	Ed	KM7AKF	Kathleen	K7KER
Dan	N7CQR	Michael	KI7QIB	Paul	KI7ADC	Daniel	KM7AXZ	Tony	KA7AHP
David	KK7VKR	Gary	KK7PJM	Ken	K7BXI	Sean	KD7YXS	Sue	KG7ALI
Andrew	N7UL	Mike	KF6YAL	Alison	--	Cat	KK7WHZ	Robert	KK6WLU
Kenn	K7ENN	Lauren	KK7PBA	Max	K7MAX	Alex	--	Addison	WF7Q
Jeff	K3JDK	Jim	K8SAT	Pete	W7PR	Steve	KK7GFI	& Ani	
Ken & Jan	AI7LF	Sean	KK7OVF	Denny	WB7UFJ				

PARC Supports the 2025 Hood Hundred

In August, the Portland Amateur Radio Club, supported communications for The Hood Hundred – a 100-mile endurance race held on and around Mt. Hood. This ultramarathon drew runners from around the world to test themselves against the challenging mountain course.

Amateur radio operators from PARC, led by Max K7MAX, provided essential communications support for racers and event managers throughout the weekend. Volunteers set up radio stations near the aid stations to assist with tracking runner progress, reporting those who dropped out, and handling emergency communication when needed.



Ham radio communications were critical for this event, as there is no cell coverage for most of the course. There are no local repeaters that reach all of the aid stations, either. In testing, organizers found a cross-band repeater placed at High Prairie Trailhead provided good coverage, and allowed communication between all aid stations and Net Control.

Volunteers allowed event staff to maintain situational awareness across a wide and rugged course where cell service and Garmin in-reach style communication is limited or nonexistent. It was a strong demonstration of amateur radio's continuing role in public service. A big thank you to the PARC members who volunteered their time and equipment for this year's event.

Hood 100 Volunteers

Max	K7MAX	Stephen	KK7GFI	David	KN6HFV
Nathan	NA7EE	Andrew	N1ACW	Jon	W7MTN
Ron	KI7FCG	Ryan	KC7TAK	Denny	WB7UFJ
Lauren	KK7PBA	Addison	WF7Q	Joseph	N7KPL
Arvind	AJ7AY	Kevin	N6KVN	Maria	W7TEE

East County Fox Hunt – September Recap and November Preview

The latest East County Fox Hunt took place on Saturday, September 20, 2025, at Mt. Hood Community College. Hunters gathered at the Fisheries Building (Parking Lot #22 West) to take on the challenge of finding four hidden low-power VHF (2-meter) transmitters scattered across the MHCC campus area. The adventure included seven hunters, seventeen QR code logs and great weather. No foxes or hunters were left behind. Mel brought her new antenna that weighs less than a whisper. She and Michael scored a clean sweep. A big thank you to Denny WB7UFJ for organizing these great events every other month.

A second fox hunt took place on Saturday, September 27, 2025 at Gresham City Park during the PDX Ham L.U.N.C.H. (Let Us Never Cease Helping). The annual L.U.N.C.H., originally the brainchild of Glenn WA7FSH, is held annually on the last Saturday of September to get all the local hams together face to face once a year. According to a recap of the event that Glenn shared during the ARES District 1 net, this fox hunt was enjoyed by many and one fox in particular stumped many a hunter. Denny never said it would always be easy!

Each transmitter location is marked with a QR code, making it easy for participants to log their finds with a quick camera phone scan. The format encourages everyone to put their homemade and portable antennas to the test and practice some radio direction-finding skills in a fun, low-stakes environment.

Fox hunts are a great way to learn how your gear works in real-world conditions, sharpen your RDF techniques, and enjoy some friendly competition with fellow hams.

Looking ahead, mark your calendars:

Next East County Fox Hunt

-  Mt. Hood Community College – Fisheries Building
-  Saturday, November 15, 2025
-  11:00 AM start time



Bring your antennas, radios, and curiosity—newcomers are always welcome! This is a ‘receiving’ only event so an amateur radio license is not required.

For questions or more details, contact Denny WB7UFJ at WB7UFJ@arrl.net.

Handi-Talky Commander: An Open-Source Project for HT Control

By PARC member Ylian Saint-Hilaire, KK7VZT

I recently got my license and have been interested in writing software for the amateur radio community. I got my chance a few months back when Kyle Husmann, KC3SLD, published online all of the Bluetooth commands for the following radios: BTech UV-Pro, RadioOddity GA-5WB, Vero VR-N76, and Vero VR-N7500/N7600. I began working on building a radio control software called *Handi-Talky Commander* based on Kyle's work.

Handi-Talky Commander is fully open-source Windows software, available on GitHub at <https://github.com/Ylianst/HTCommander>, that allows you to pair your computer to your HT (Handheld Transceiver, sometimes called a “handi-talky”) and take full control of it. Basically, your HT becomes a computer peripheral.



There are a lot of features built into this application, and so I will only mention a few here:

- **Bluetooth audio** – Use a computer headset and route the audio to the radio. Includes real-time audio visualization so you can see how clear your voice is.
- **Speech-to-text and text-to-speech** – Transcribe conversations into text, or type text and have it spoken over the air. (Note: this requires a capable computer; the faster the better.)
- **APRS messaging and maps** – Send chat messages over APRS (Automatic Packet Reporting System) quickly and see responses in near real time.
- **Winlink support** – Send and receive emails using your radio. This is an essential amateur radio feature, made simple when the software does most of the work.
- **Terminal and BBS support** – Access local BBS (Bulletin Board System) stations or set up your own.

There is much more to discover. Probably the most important feature of all is that the source code is available to everyone, enabling other amateurs to collaborate or branch off on their own projects. For anyone with a supported HT, this is an open invitation to post feedback and suggestions on GitHub. I would also like to see more HT manufacturers add similar open interfaces to their radios, as this unlocks an ecosystem of software developers. If you ever see a representative for a radio company, make sure to mention this.

— Ylian Saint-Hilaire, KK7VZT

Editor's Note -

It's exciting to see members sharing their projects and creativity with the ham community. Articles like this remind us that amateur radio is always growing and evolving as each ham makes the hobby their own.

PARC Radios Supporting the Next Generation of CW Operators

The Long Island CW Club (LICW) Kids Program has become one of the most successful initiatives for introducing young people to Morse code and amateur radio. With dozens of weekly online classes and a supportive community of Elmers, the program has helped hundreds of kids worldwide discover the fun of CW. Students range from elementary school through high school, and many go on to become licensed hams who actively use their new skills on the air.

Here in Portland, PARC members Bob Cady, W7JNM, and Ken Cone, K7BXI, have been key instructors in the program. Earlier this year, PARC further supported the effort by donating several radios for use by students. These radios are already making a difference.

Bob recently shared an update about two young hams who benefited directly from the donation: Nico, KC1VPU, from Boston, and Gabriel, KE2EEQ, from Queens. Though they first met through the LICW CW class, they recently got together in person to activate POTA site US-2059, Gantry Plaza State Park (NY).

The two new friends spent the day enjoying CW contacts, operating on Gabriel's Yaesu FT-897, a rig he knows inside and out. Their enthusiasm for the hobby is clear—and inspiring.

Both Nico and Gabriel are already racking up impressive Parks on the Air activity, much of it using CW:

- Nico, KC1VPU – 8 POTA activations and 34 park chases.
- Gabriel, KE2EEQ – 3 POTA activations and 107 park chases.

The LICW Kids Program is shaping the next generation of radio amateurs. By providing equipment our club helped young operators not only learn Morse code but also build friendships and memories that will last a lifetime.



PARC Supports OMSI Science Festival 2025

The Portland Amateur Radio Club was proud to participate in the Oregon Museum of Science and Industry's (OMSI) annual Science Festival this September. Club volunteers helped staff and equipped a special amateur radio table in the OMSI lobby, connecting curious visitors with the active radio room aboard the USS Blueback submarine (W7SUB).

From the very start of the day, the radio table drew interest from visitors of all ages and skill levels. Many learned how to send their first name in Morse code, practicing on a CW keyer with coaching from experienced operators. Once comfortable, they hopped on 20 meters, where—under the supervision of a licensed ham—they transmitted their name to the submarine radio room. Each participant then received a friendly reply back from the sub, and the operator on hand guided them through the process of decoding their message.

Not everyone was ready to tackle the straight key, and that was just fine. Several visitors made their first-ever radio contact with the Blueback using FM on VHF instead. Over fifty attendees made 'contact' with the sub. For many, the



OMSI Science Festival - USS Blueback Volunteers

Ken K7BXI	Jim K8SAT	Cat KK7WHZ
Bob W7JNM	Sean KK7OVF	Nate NA7EE
Gary KK7PJM		

experience didn't stop there—they went on to tour the submarine itself, seeing firsthand the historic radio room and the operator who had just answered their call. The combination of live radio activity and hands-on history made for a powerful “full circle” experience.

This event was a wonderful example of how amateur radio can spark curiosity and create memorable connections. A big thank you goes to Ken K7BXI and Bob W7JNM for organizing the effort and ensuring the day was a success.

For more information, and great pictures, see the QRZ page of the W7SUB USS Blueback Submarine Amateur Radio Club at <https://www.qrz.com/db/W7SUB>

July Meeting - Power Pole Connectors with Max K7MAX

At the July 2025 meeting, PARC member Max K7MAX shared his knowledge and enthusiasm for Anderson Powerpole connectors. These small but mighty connectors have become the de facto standard for 12-volt DC power connections in the amateur radio world, particularly for portable and emergency operations.

Max explained that the red and black connectors are most commonly used to denote 12 volts, but other colors are available if you want to designate different voltages in your setup. Their popularity in ham radio circles is no accident—ARES and other emergency groups have adopted Powerpoles as the standard, ensuring that operators can quickly and safely connect equipment in the field.

One of the great advantages of Powerpoles is that they are genderless, so any connector can mate with any other, eliminating the guesswork of plug orientation. For added confidence in the field, Max recommended carrying a small polarity checker, which can be built or purchased, to confirm that connections made by others are wired correctly before plugging in your gear.

He also pointed out that Powerpoles can be used creatively. For example, if you have an HT that normally charges from a 120V wall wart that converts that to 12V for the HT battery, you can cut the cord, splice in Powerpole connectors, and instantly create flexibility: keep using the wall plug at home, or disconnect and plug directly into 12 volts when you're operating off-grid.

Max encouraged members to seek out power supplies that include built-in Powerpole connectors and to incorporate them into battery box builds. By standardizing on this simple connector, hams can work seamlessly together in the field, avoid mismatched cables, and be better prepared for emergency operations.

He also noted that while Powerwerx offers excellent connectors, their instructions may not be the clearest, so a bit of extra care is warranted when assembling your own cables.

September Meeting - Ward Silver NØAX on Grounding and Bonding

In September, the Portland Amateur Radio Club welcomed Ward Silver, NØAX, for an enlightening talk on one of the most fundamental — and often misunderstood — aspects of station design: *grounding and bonding*.

Ward is well known in the amateur community as a longtime contributor to QST, the author of the ARRL Handbook's station construction chapters, and the author of the ARRL book *Grounding and Bonding for the Radio Amateur*. His background as both an electrical engineer and an experienced contesteer gives him a unique ability to bridge theory and practice.

Grounding vs. Bonding

Ward began by clarifying terms that are often used interchangeably. “Ground” can mean several things: a connection to earth, a circuit reference, or even just a descriptive adjective. But what matters most for hams is how we use these connections.

- **Grounding** usually refers to connecting equipment or conductors to earth, providing a path for AC safety, lightning energy, or stabilization of a power system.

- **Bonding**, on the other hand, means connecting two conductive points together so they remain at the same potential. This is critical in the station: when everything rises and falls together, you minimize stray currents, reduce RFI, and improve safety.

Ward emphasized that hams don't need three different systems (one for AC safety, one for lightning, and one for RF). A *single, solid, low-impedance system* can serve all three needs if it's planned and built carefully

Practical Tips

The talk was filled with practical, field-tested advice. One tip especially resonated with members who operate away from home: when setting up a portable or mobile station (think Field Day or POTA), consider carrying a roll of aluminum foil and a few alligator clip connectors. Laying out foil on your operating table under all your gear and clipping the equipment to the foil creates a quick, effective bonding surface. It's a lightweight way to tame RF hot spots and keep everything at the same potential in temporary setups.

Ward also discussed how bonding straps or wires should be short, wide, and sturdy — low inductance counts more than low resistance when dealing with RF or lightning. He cautioned against relying on “magic grounds” and stressed that managing currents is the key, not chasing an elusive zero-volt reference.

For those who want to dive deeper, Ward's book “Grounding and Bonding for the Radio Amateur” (second edition) expands on these topics with diagrams, case studies, and construction tips. It's available from the ARRL Store or through Amazon.

Portland Area ARES & Emergency Training Nets

Oregon ARES District 1: Daily 7:30 PM 147.32, 442.325, 444.400, 147.040 MHz repeaters <http://www.oregonaresd1.us/wp/>

Clackamas County ARES Sundays at 7 PM 147.120 & 444.225 repeaters, Echo Link AC7QE-R <http://clackamasares.org/>

Washington County ARES Tuesdays at 7 PM (except 3rd Tue) 145.450 MHz repeater <http://washcoares.org/>

Multnomah County ARES Wednesdays at 7 PM 146.840 MHz repeater PM <https://multnomahares.org/>

Clark County ARES Mondays at 7 PM 443.925 MHz repeater <https://www.ccareswa.org/calendar>

Portland Prepares Net Sundays at 8:10 PM 147.040 MHz repeater <https://portlandprepares.org/net-resources/radio/ham-radio-2/practice-opportunities-2/net-net/>

Oregon Traffic and Training Net After 33 years on the air, this net ended on August 29, 2025. See the website for training materials <https://qsl.net/nttn/> Thank you Dave W7EES for decades of service to this community!

Other Portland Area Nets of Interest

PARC Club Net Tuesdays at 7:00 PM on 146.84 club repeater w7lt.org

Linux User Net every Monday 8:10 PM-9:00 PM 147.32, 442.325, 444.400, 147.040 MHz repeaters <http://kc7nyr.com/linux/>

The Outdoors Net every Thursday 8:05 PM-9:00 PM 147.32, 442.325, 444.400, 147.040 MHz repeaters <https://theoutdoorsnet.net/>

HandiHam Net Sundays at 7:00 PM on 146.84 club repeater

Oak Lodge Net Mondays at 7:30 PM on 147.18 club repeater

CW Practice Net – Dan Presley N7CQR - Every Tuesday - 7 PM (local PST) on 28.160 and 8 PM on 3.550 KHz. Any speed or skill level is welcome!

Welcome to Our New Members!

SANGRAAL KM7BYY	REBECCA KN6KAV	TOM KM7BLP
DENNIS WA7DRO	MIKEL KM7CBI	YLIAN KK7VZT
MIKE W6STR	MATTHEW KQ4LJV	FRED KJ7ARS

We're excited to welcome all of our new members this quarter to the Portland Amateur Radio Club! Whether you are brand new to the hobby or a seasoned operator, we're glad to have you with us.

Zoom is great for staying connected, but nothing beats sharing stories and slices in-person at our monthly meetings—yes, there's pizza! Baked goods are also welcome. Come early for the Elmer Help Session and Social Hour before the meeting. It's a great chance to get acquainted, ask questions, get advice, or share your own experience with others.

W7LT Places in AMSAT Field Day 2025 Results

The results of the 2025 AMSAT (amsat.org) Field Day were recently published in the *AMSAT Journal*, and the Portland Amateur Radio Club made a strong showing! Operating as W7LT, the club came in 5th place out of 17 entries.

The article made special note of numerous instances of Murphy's Law coming into play with both hardware and software issues slowing operators down. W7LT had its own Murphy moment when an errant extra period entered into the longitude field of the radio control computer made the system inoperable. Several satellite passes were missed while data files were combed through to find the cause of the error and allow operations to resume.

AMSAT Field Day is held alongside the ARRL's annual Field Day in June, but with an emphasis on satellite operation. Scoring is based on successful contacts made through amateur satellites, including both FM and linear transponders. Scores across all entries ranged from 1 to 118 points. W7LT earned 30 points working the satellites using FM and SSB voice during this event. Voice contacts count for 1 point each while CW and digital contacts are 3 points each.

It's worth noting that the top-scoring entries generally had multiple operators working nearly the full 24 hours, along with substantial antenna arrays on azimuth/elevation rotors under computer control. While W7LT's portable setup was more modest, this gives our club a benchmark and a few ideas for the future as we look ahead to upcoming field days.

Oregon's Distracted Driving Law and Amateur Radio

Many of us operate our radios from the mobile shack - our vehicles. Oregon's distracted driving law, however, raised concerns for amateur operators when it was first enacted in 2017.

When the state considered broad restrictions on handheld electronic devices, the ARRL with support from local amateurs, including John Core KX7YT (then the ARRL Oregon section manager) stepped in to ensure our role in public service communications was recognized. Amateur radio has long been an auxiliary communications system for public safety, especially in disasters and emergencies when other systems fail.

Thanks to this advocacy, Oregon law provides an *affirmative defense* for licensed amateur radio operators using FCC-authorized equipment. This means that if you are cited, you can demonstrate that you were legally operating amateur radio equipment under your license.

Oregon Revised Statutes – ORS 811.507 – “Was 18 years of age or older, held a valid amateur radio operator license issued or any other license issued by the Federal Communications Commission and was operating an amateur radio;”

It's important to remember that the exemption is not a free pass to be careless. As hams, we pride ourselves on operating responsibly. Please keep your primary focus on the road. Use mobile radios and microphones in a way that does not distract from driving.

It's a good practice to carry:

- A copy of your current FCC license
- Documentation that the equipment you are using is amateur radio gear (e.g., manuals, model numbers, etc.)

Amateur radio remains a recognized and valuable part of Oregon's emergency communications framework. Let's continue to demonstrate the trust placed in us by operating safely, legally, and courteously whenever we're on the air and on the road. *This article is not intended to be legal advice.*

Portland Amateur Radio Club POTA Party – September 6, 2025

The Portland Amateur Radio Club gathered on September 6th for a Parks on the Air (POTA) party at Rooster Rock State Park, just 25 minutes east of Portland on the Columbia River. This scenic location is a POTA operator's dream, encompassing *four* official parks (a '4fer'):

- US-2850 Rooster Rock State Park
- US-3424 Ice Age Floods National Geologic Trail

- US-0731 Columbia River Gorge National Scenic Area
- US-4381 Mount Hood National Forest

The weather cooperated beautifully—slightly overcast, warm, and dry—ideal conditions for radio and fellowship. A good-sized group of PARC members and friends gathered before 10 a.m. to set up three operating stations, string antennas, and fuel up on donuts and snacks before getting on the air.

POTA is about more than just radio. It's about being outdoors, appreciating our public lands, and making *ten confirmed contacts* to officially activate a park. On this day, six operators logged successful activations according to official website submissions: K7OSH, AJ7EE, KF6YAL, WF7Q, KK7OVF, and KK7VKR.



The HF club stations ran both SSB and CW throughout the day. Operators also enjoyed some VHF excitement by making simplex contacts back into Portland with club member Etienne K7ATN on 146.580 MHz. Most used handheld Yagi antennas, but Kathleen K7KER proved that creativity matters—she completed her contact using a long whip on an HT, standing on a picnic table for that extra bit of propagation. Sometimes a few feet really does make all the difference.

Paul KD7ADC and Raoul W7RPS drew a big crowd by bringing their Icom IC-905s and collinear antennas for operations in the GHz spectrum. First, they set up stations on opposite ends of the party site and successfully demonstrated digital television (DATV) and voice on 5.7 GHz. Club members gathered around to make cross park QSOs and to see themselves appear on live TV—a highlight of the day. Later, Raoul packed up his gear and relocated to Mt. Pleasant Elementary School in Washington, about 1.5 miles away across the river. With both operators now in clear line-of-sight and using high-gain Yagi antennas, the digital TV and voice contacts continued over the longer distance.

This GHz demonstration had a big impact on George KJ6VU, PARC member and host of the Ham Radio Workbench podcast. George discussed attending the PARC POTA party on podcast episode 246 (begins around 1:58:00 time mark) and spent quite a bit of time talking about Paul and Raoul's demonstration and the experimentation they have been doing recently in our area to test audio and video transmission from different hilltop to hilltop combinations. George was sufficiently intrigued and he is now the proud owner of a new 905 and he used it during the ARRL VHF contest the following weekend from Bald Peak. A big thank you to Paul and Raoul for the work they have been doing to make this demonstration possible and share the fun.

Sean KK7OVF set up a satellite station using a Yaesu FT-847 and an Arrow Yagi. Attendees had the chance to try SSB satellite QSOs via RS-44, making contacts with operators from Virginia, Texas, California, Michigan, and Alaska. A special highlight came when AL9D in Alaska—who was simultaneously demonstrating satellites at a local hamfest—worked the PARC operators, giving both events a memorable exchange. Several attendees made their very first satellite contacts.



Of course, no PARC event is complete without good food. A very big thank you to Ken AI7LF, who put in the hard work of cooking delicious hamburgers and hotdogs along with all the fixings. Add in homemade cookies and other sides brought by attendees, and no one left hungry. The September 2025 PARC POTA Party was a great success—a day of radio, learning, and camaraderie in one of Oregon’s most beautiful natural settings. Many thanks to all who attended, contributed, and helped make the event a standout memory for the club!

Satellite QSOs

	N6OVP CM84 California	W44PGM FM07 Virginia	N8HI EN73 Michigan	WD5GRW EM13 Texas	AL9D BP51 Alaska
CN85					
N7UL	X	X	X	X	X
KK7VKR	X	X	X	X	X
KF6YAL	X	X	X	X	X
KK7WHZ	X	X		X	
K7KER			X		
N7CQR		X			
KK7OVF	X	X	X	X	

Satellite RS-44 20:18utc 9/6/2025

POTA Party - log sign-in

Ken	AI7LF	Jim	K8SAT	Pete	W7PR	Addison	WF7Q	Paul	KD7ADC
Cat	KK7WHZ	David	K7DHz	Steve	KK7GFI	Andrew	N7UL	Raoul	W7RPS
Fred	KJ7ARS	Dan	N7CQR	Josh	K7OSH	Alan	AJ7EE	David	KK7VKR
Mike	KF6YAL	Kat	K7KER	Sean	KK7OVF	George	KJ6VU		







PARC Taking Flight: Organizing Amateur Radio Balloons

At the September club meeting, members got a taste of something new for PARC — the idea of launching our own amateur radio balloons. Two types of balloons were introduced:

- **Pico Balloons:** small, lightweight Mylar balloons that float between 35,000–45,000 feet. They can stay aloft for days, weeks, or even months while carrying tiny payloads under 20 grams. At a relatively low cost (\$150–\$300), they're perfect for APRS, WSPR, or simple telemetry. Pico balloons are rarely recovered, but they provide extended opportunities for tracking and global fun.
- **High-Altitude Balloons (HABs):** larger latex balloons that carry multiple payloads (up to 4 pounds each), soar to 80,000–120,000 feet, then burst and descend via parachute. These flights last only a few hours, but can

support cameras, cross-band repeaters, GPS tracking, and science experiments. At \$300–\$1,000, HABs are more expensive and complex but also allow for payload recovery and reuse on future launches.

Both options offer exciting opportunities for hands-on technical learning, experimentation, and public outreach — as well as a bit of adventure chasing balloons across the countryside!

Building a PARC Balloon Team

Following the meeting, an email went out to interested members with next steps. Club members are encouraged to:

1. Watch a video of a Texas high-altitude balloon launch by KE5GDB and team <https://www.youtube.com/watch?v=3iEZicza1hs&t=756s>
2. Check out a short video of a Pico balloon that crossed the U.S. before being recovered in Nova Scotia <https://www.youtube.com/watch?v=FED-p5CSBkc>
3. Begin thinking about which aspects of the project you'd like to lead or be part of.

Examples of teams:

- Planning & logistics (weather, launch sites, payload testing)
- Payload design and assembly (hardware & software)
- Procurement (balloons, parachutes, lift gas)
- Launch communications (media, outreach, ARRL coordination)
- Recovery teams (vehicle chase, tracking, telemetry)
- Documentation (photos, video, reports)

For Pico balloons, recovery is rare — but tracking them via amateur.sondehub.org is half the fun. At any given time, dozens of these balloons are circling the globe!

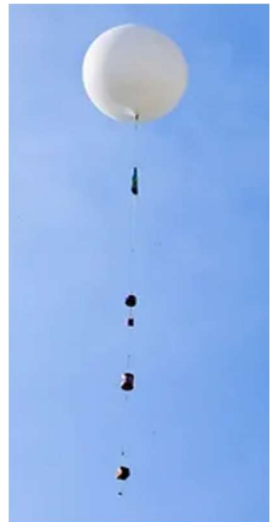
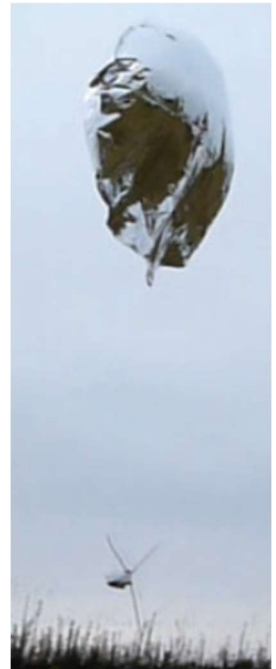
What's Next?

A kick-off online session will be scheduled to organize initial teams and identify coordinators. In the meantime, members are encouraged to think about their interests, skills, or questions.

This is a chance for PARC to try something new, bring together technical skills across the club, and maybe even put Portland on the ballooning map. As the slide at the September meeting put it: *"Let's put PARC in the stratosphere!"*

ARRL HOA Antenna Bill

The ARRL has launched a nationwide effort aimed at securing the passage of federal legislation that would grant Amateur Radio Operators the same rights to install antennas on their property as those enjoyed by users of TV antennas, wireless internet, and flagpoles. This effort follows the reintroduction of the Amateur Radio Emergency Preparedness Act in February 2025. The bipartisan bills -- H.R.1094 in the House and S.459 in the Senate -- are designed to prevent restrictive homeowners' association (HOA) rules that currently prohibit or severely limit the installation of amateur radio antennas, even when such antennas are hidden in trees, placed in attics, mounted on vehicles, or look like flagpoles. All amateur radio operators are encouraged by the ARRL to contact their federal representative and express their support. The ARRL has tried to make this contact process easier by creating a pre-drafted letter you can use by just entering your call sign and pushing the submit button at www.arrl.org/HOA.



Pacific Northwest DX Convention 2025

The 70th Annual Pacific Northwest DX Convention was held August 15–17, 2025 at the Monarch Hotel & Conference Center in Clackamas, Oregon. The event was hosted by the Willamette Valley DX Club (WVDXC), which was also celebrating its own 70th anniversary this year. As always, the convention brought together DXers and contesters from across the Pacific Northwest and beyond for a weekend filled with presentations, fellowship, and stories from the far reaches of amateur radio.

Highlights from the Speaker Program

The convention program offered a strong lineup of presentations covering DXpedition planning, antenna building, propagation, ARRL programs, and fascinating first-hand accounts from operators who traveled the globe.

- **Al K7AR – Going on Your First DXpedition**

Al walked attendees through the nuts and bolts of organizing a DXpedition — everything from picking your teammates and balancing family considerations, to planning around weather, contests, and travel logistics. He emphasized the importance of licensing research, customs paperwork, and bringing all your own equipment. His bottom line: *be prepared, be legal, and don't forget to have some fun away from the radio!*

- **Lee K7TJR – Low Band Receive Antennas**

Lee explained how investing in receive antennas can dramatically improve DX performance. By separating transmit and receive systems and focusing on front-to-back ratios, operators can cut down interference and dig out the weak ones.

- **Carl K9LA – Cycle 25: What the Future Holds**

Carl shared his analysis of where we stand in Solar Cycle 25. He believes the cycle has likely peaked, but the coming fall and winter should offer excellent daytime conditions on 15, 12, and 10 meters. He also highlighted the spring and fall as the best windows for inter-hemisphere QSOs.

- **Mark KB7HDX – ARRL Forum**

Mark introduced the new DXCC Trident Award and the online Alpha Radio Museum, a rich archive of radios past and present. He also touched on the ARRL's 2025 DXCC Program review, which is grappling with questions raised by remote operating technology — including the pros and cons of whether “unmanned” remote island stations should count as true DX.

- **Adrian KO8SCA – Evolution of the 4U1UN Station**

Adrian shared his DXpedition to Mt. Athos, noting the role of the Orthodox monasteries in permitting operations and approving QSL cards. He then discussed the United Nations station, 4U1UN, which has come back to life thanks to remote operation from its secure new location in the UN building.

- **Bob W7YAQ and Al K7AR – Wallis Island and Fiji**

Bob and Al recounted their expedition to Wallis Island, a French territory north of Fiji. Their team logged 15,000 QSOs with 137 countries, using DX Commanders and a 160m inverted-L. The adventure even made the 7pm local TV news with its own video segment. After Wallis, they wrapped up with three days of operating from Fiji.

- **Bruce K3NQ – The HD8G Galapagos Islands DXpedition**

Keynote dinner speaker Bruce described his trip with a 25-operator team to the Galapagos. This family-friendly DXpedition included time to explore the islands' unique wildlife, hidden beaches, and local culture. With his wife Medea at his side, Bruce called it “the best experience of my 60+ year ham career.”

A PARC Table to Remember

The Portland Amateur Radio Club had a presence at this year's convention. Several members attended, and Saturday's banquet dinner became extra memorable when keynote speaker Bruce K3NQ and his wife Medea joined the PARC table.

Seated around the table (from left to right in the picture) were Pete W7PR, Ken AI7LF, Raoul W7RPS, Sean KK7OVF, along with Medea and Bruce. The evening was filled with stories ranging from Bruce's motorcycle collection to behind-the-scenes tales of DXpeditions gone awry (including one where operators survived on nothing but coconut milk while awaiting pickup from a remote island!).

Adding to the excitement, PARC member Raoul W7RPS scored big in the sponsor raffle, winning a PreciseRF HG-10 Magnetic Loop Antenna. Wow!

Closing Thoughts

Between the technical sessions, stories of remote radio adventures, and plenty of time to connect with fellow DXers, the 2025 Pacific Northwest DX Convention was a resounding success. Congratulations to the Willamette Valley DX Club for hosting a stellar event and marking their 70th year in style.

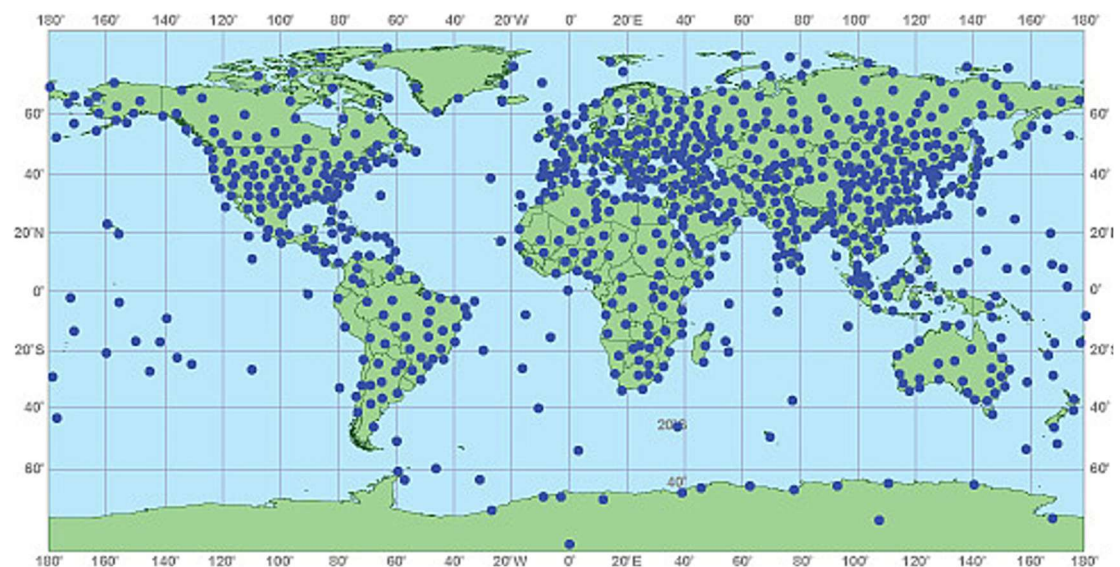
For PARC members who couldn't attend, keep an eye out for the 2026 convention, which will rotate to another Northwest host club. If you've ever thought about trying DXing or even joining a DXpedition, the convention is the perfect place to learn, get inspired, and connect with hams who've been there and done it.



Tracking and Recovering Weather Balloons

Every day, twice a day, the National Weather Service (NWS) launches weather balloons from close to 90 stations across the United States. Many more are launched around the globe by other nations at approximately 1,300 locations. Each balloon carries a small instrument package called a radiosonde, which measures temperature, humidity, pressure, and position as it ascends and descends through the atmosphere. This data is critical to weather forecasting and is transmitted back to the launch site using UHF 400-406 MHz (other frequencies are used in other locations).

In the Portland area, the closest launch location is in Salem, Oregon at the McNary Airport. Approximately 25 percent of the NWS sonde launch sites, including Salem, use an Automatic Radiosonde Observing System (AROS). The AROS is designed to operate autonomously for twelve days (24 launches) and consists of hardware and software components that function to prepare a radiosonde for flight, inflate and launch a weather balloon with flight train, receive and process the radiosonde telemetry into meteorological data, generate formatted data reports, and transmit meteorological data to designated locations.





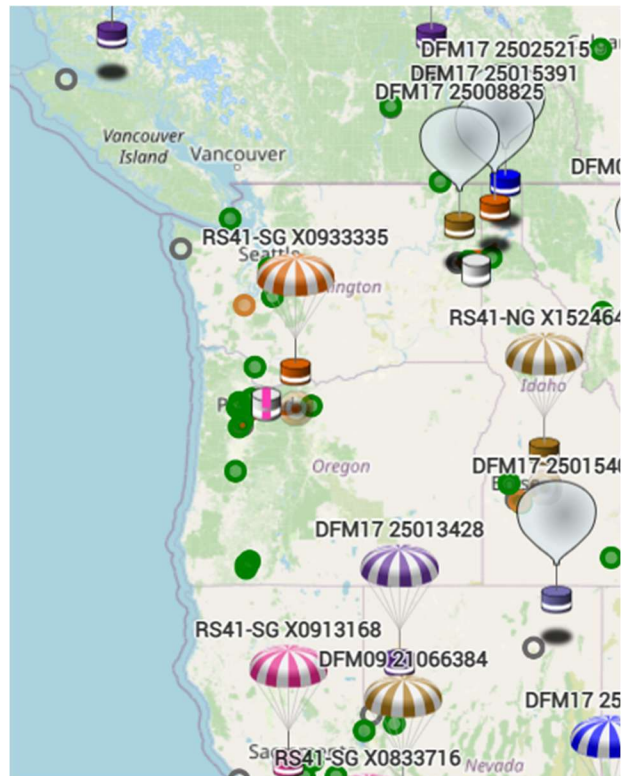
During flight, a radiosonde can ascend to 115,000 feet (35,000 meters) over a period that can last in excess of two hours. Depending on wind speed and direction at different levels in the atmosphere, the balloon can travel just a few miles from its launch site or upwards of 125 miles. The radiosonde is exposed to temperatures as cold as -130°F (-90°C) and air pressures that are only a few hundredths of what is found on the Earth's surface. For more information, including site maps, history of upper air sounding, engineering reports, etc., see weather.gov/upperair.

Once the balloon has expanded beyond its elastic limit and bursts, the radiosonde begins its quick journey back to earth, and the recovery chase is on!

Sondehub.org – Your Tracking Companion - The easiest way to begin is with sondehub.org. This website tracks active radiosondes in real time using a network of volunteer ground stations. Each balloon's location, altitude, and predicted landing site are displayed on a map. By zooming into our area, you can often see balloons launched from the Salem location drifting into Portland and the greater Willamette Valley region.

It's rare for a radiosonde to be tracked all the way to the ground since UHF generally requires line-of-sight. The signal is usually lost by the tracking stations at an elevation of 200 to 500 meters. The mapping and prediction information from sondehub will get you very close to the landing site, but it will still be necessary to perform the final search using a combination of your keen eyes and either traditional radio fox hunting tools and skills or a dedicated radiosonde receiver and decoder. The radiosonde will continue to transmit until either its batteries are depleted or a shutdown timer activates (usually 8 hours or less).

If you are located in the Willamette Valley region, you can take your UHF handheld radio outside during the flight time and hear the transmission. Tune to 401.400 MHz (the frequency most commonly used by Salem) and if you are line-of-sight you will be treated to the constant rhythmic bursts of weather and location data. Note that this frequency is outside of the amateur radio frequencies so no transmitting here – receive only.



Setting Up a Ground or Portable Station - If you'd like to contribute data to Sondehub, you can install a small tracking station at your QTH. Many hams use a simple VHF antenna (the sonde transmits around 400–406 MHz) paired with fairly inexpensive software-defined radio (SDR) hardware. With the right software, your station can automatically upload decoded sonde signals to the Sondehub network. It's a fun way to add to the global tracking effort while sharpening your radio skills. You can also focus on keeping your tracking equipment portable for recovery chases in the field.

The two most popular software solutions (along with their supported hardware):

radiosonde_auto_rx: This Linux based software runs best on a standalone single-board computer (e.g., Raspberry Pi 3 or newer) along with an SDR dongle and an antenna. The software is created and made available by Project Horus, an

Amateur Radio High Altitude Ballooning project based in Adelaide, Australia. See the GitHub page at https://github.com/projecthorus/radiosonde_auto_rx/wiki

rdzTTGOsonde: This software turns ESP32 boards with a SX127x-LoRa-Chip into a portable receiver for radiosondes. One of the currently recommended options is the 433 MHz LilyGo T-Beam with the optional soldered on OLED screen. This can come with built in GPS, wi-fi, charger port and battery connector. Just add an antenna to the BNC port. This is a pretty beginner friendly solution that does not require coding. This software is created and made available by Hansi DL9RDZ, an amateur radio operator from Germany. See the GitHub page at https://github.com/dl9rdz/rdz_ttgo_sonde/wiki

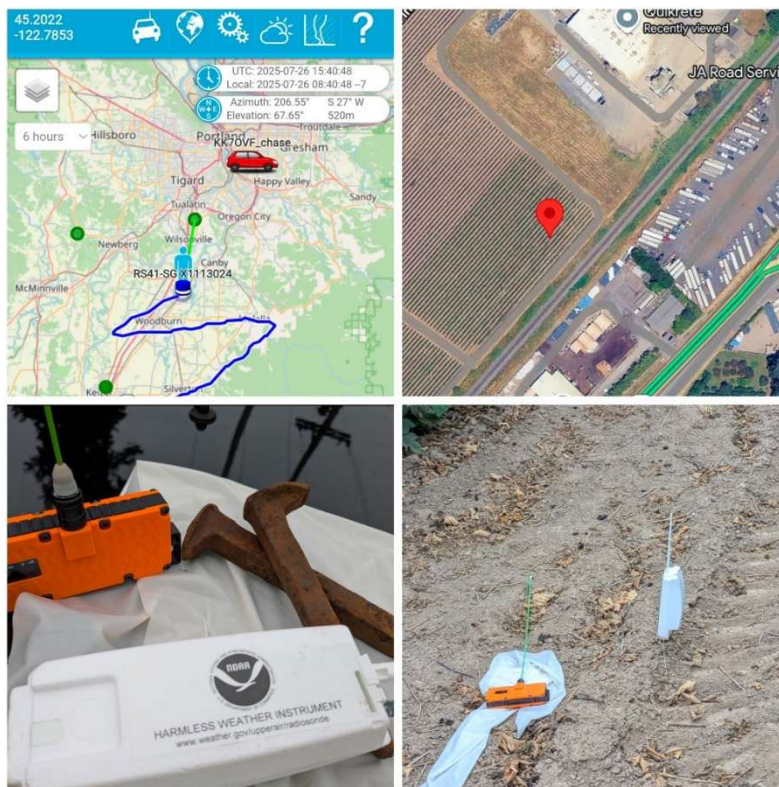
For those who want to chase radiosondes in the field, a portable tracker is invaluable. Paired with a good pair of shoes, they allow you to locate a sonde as it descends and zero in on its landing spot with precise GPS data.

Why Recover a Radiosonde? Once on the ground, radiosondes can often be found hanging in trees, resting in fields, or tucked into bushes. Recovery is half the fun and many hams report the thrill is not unlike a fox hunt with a real prize at the end. With a bit of cleanup and some tinkering, radiosondes can often be reprogrammed for amateur radio experiments. They make good starting points for APRS trackers, telemetry beacons, and other ham projects.

Getting Started

- Check Sondehub.org to see when and where balloons are active. Click on any of the icons on the map, including the NWS Salem location, and more information will pop-up
- Learn the schedule: the NWS usually launches from Salem between 4am and 5am and then again between 4pm and 5pm
- Gear up: good shoes, a co-pilot, and your tracking devices of choice. Consider hi-visibility clothing and flashlights for evening chases
- Join the hunt: when a balloon lands in the Portland metro area or Willamette Valley, grab your gear and see if you can recover it! *Report chases and recoveries on sondehub.org, please respect private property and ask permission. Nothing like the first time you say to someone, "Hello. I'm an amateur radio operator chasing a National Weather Service balloon and I think it landed in your backyard. Can I go through the gate?"*

Tracking and recovering radiosondes combines radio skills, outdoor adventure, and hands-on experimentation. Whether you set up a home station or build a portable tracker, it's a rewarding way to connect with the science behind our daily weather forecasts—and maybe even add some new hardware to your ham radio toolbox.



Dits and Dahs – Updates from Members and Friends, Lightly Filtered

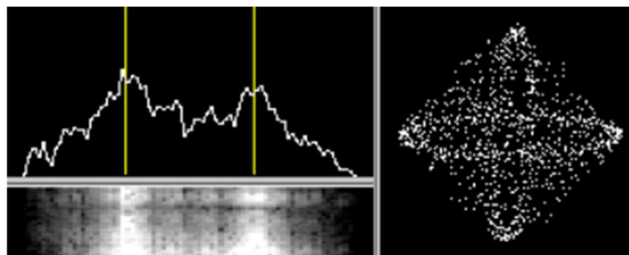
Ken AI7LF - Ken had the opportunity to visit the Marconi Center in Cornwall UK in September. The Marconi center is at the location where the 27 year old Guglielmo Marconi made the first wireless transmission across the Atlantic Ocean in 1901. His transmitter was a 25KW spark gap transmitter and the receiver in Newfoundland consisted of an antenna suspended from a kite, a coherer, and a relay. The message was the letter S, dit-dit-dit. At the time, Marconi thought the signal path was groundwave. Little was known about the ionosphere. The Marconi Center is run by the Poldhu Amateur Radio Club (PARC). One of the members let Ken operate the club station to make a 20 meter contact using their special club call sign GB2GM.



If you find yourself visiting Cornwall, in the far Southwest of England, make sure to visit the Marconi Center during the limited operating hours (Tuesday and Sunday) and say hello to our 'PARC' friends from across the pond.

Sean KK7OVF – Sean participated in the CQ WW RTTY DX contest over the weekend of September 27-28, 2025. While not competitive with the big operators it was a great experience to try out this digital mode for a couple hours on Saturday and a couple more on Sunday. The Yaesu FTdx10 HF radio does RTTY natively with a built in decoder. Sean also tried a separate software package, MMTTY, which is very popular with RTTY operators. In addition to completing successful contest exchanges with a number of U.S. and Canadian based operators, DX QSOs were also made with Madeira Island, Canary Islands, Columbia, Argentina, Suriname, Japan, Brazil, Guam, French Guiana, and the U.S. Virgin Islands. All operations were on 10 meters.

RTTY, or Radioteletype, is one of the oldest digital communication modes used in amateur radio. It allows for the transmission of text using two different tones to encode the text being sent. An RTTY signal is a single carrier (like CW), but instead of being modulated on and off like CW, the transmitted power is kept constant, and modulation is imposed by changing the frequency by a preset amount (a “shift” of 170 Hz). The picture, from the MMTTY software window, helps you tune into the dual frequency of the RTTY transmission (the two signal peaks).



~ Please share your dits and dahs for the newsletter next quarter ~

PARC Repeater Committee Update

The PARC Repeater Committee continues to work hard keeping the club's systems on the air and serving the greater Portland region. The group recently welcomed George KJ6VU, who joins the committee as it reviews and refines the long-term vision and goals for the repeater network.

Larch Mountain (Washington) – The 146.84 repeater remains fully operational. A maintenance trip is being planned before winter to perform a site health check and ensure reliability through the colder months.

Mt. Scott (Clackamas, Oregon) – The 146.94 repeater is on the air at low power. In late September Pete W7PR relocated it to a spare antenna at the east end of the building, improving both transmit and receive performance after

additional work in late September.

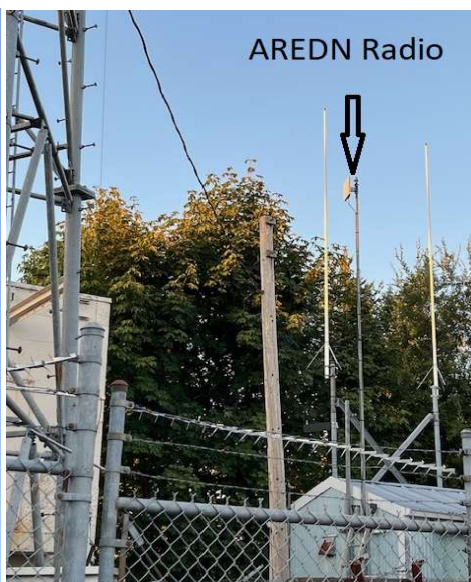
The 147.18 repeater is fully operational as well and will have its power amplifier installed in October.

WINLINK 144.91 – Both AX.25 and VARA-FM gateways are fully operational.

APRS 144.39 – Fully operational and performing well.

In September, the team also installed a 915 MHz Meshtastic node at Mt. Scott. The self-contained unit, built and installed by Ed K7EWR, and Aaron KD7VDG, is powered via a USB charger within the building. A 5 GHz AREDN radio was also temporarily mounted using a Rohn push-up mast as a proof-of-concept test. Although the preferred link target was Council Crest, the strongest connection came from OHSU - demonstrating promising regional mesh potential. The test installation was lowered in late September in preparation for winter.

As noted in the Q2 2025 newsletter, thanks to significant work by Pete W7PR, PARC is in the process of acquiring a large tower from a third party for use at Mt. Scott. Preparations are underway to clear and organize the storage site for the tower sections. Pete and Aaron worked on pallets in September to keep the tower sections off the ground once delivered, and John KD7BCY, removed several tree stumps earlier in the month to provide clear access for handling equipment. While no date has been set for dismantling the tower, groundwork continues to ensure everything is ready when the time comes.



PARC REMOTE ACCESS FLEX 6600 HF RADIO

Don't forget that the club's new remote FLEX 6600 HF radio is now operational and available for use by club members. This state-of-the-art SDR radio is accessed through the internet and SmartSDR applications on your Windows and Mac computers. It works great with iOS and Android apps.

The antenna is an 80-6 meter DX Commander vertical antenna, perfectly situated in a quiet RF environment, ensuring optimal performance for all your HF contacts. Whether you're into SSB, digital, or CW contacts, this FLEX 6600 HF radio is an excellent choice, providing clear and reliable communication.

The station is remotely managed with the Station Controller provided by George Zafiropoulos, ZKJ6VU. George generously included PARC in the beta test of the Station Controller which is giving us the ability to remotely power cycle, manage, and register the radio with Flex Radio.

To gain access to this great resource, please contact Ken AI7LF at ai7lf@w7lt.org. He will provide you with the necessary instructions, username, and password to get on the air with this radio.

Volunteers Needed for Tuesday PARC Net Control

Our weekly PARC Tuesday Night Net at 7:00 p.m. is an important touchpoint for the club — a chance to share announcements, check in, and stay connected. Right now, John KD7BCY is carrying the full load as our only official Net Control.

We'd love to lighten that load! The net is short (15 to 30 minutes), and a script is provided — no improvising required (unless you want). All it takes is a willingness to read, listen, and keep things moving. Richard KK7JAW has expressed interest so keep an ear out for him soon. *Please reach to Pete pmrodabaugh@gmail.com or Wayne wa7ne@w7lt.org*

Many hands make light work. If you've never been Net Control before, this is a great way to build confidence on the air and help the club at the same time Please consider volunteering for a turn or two — John and PARC will thank you!

Upcoming Club and Regional Calendar	
PARC Club Net Tuesdays at 7:00 PM on 146.84 club repeater W7LT	
Dates	Event
October 6	Board Meeting
Oct. 10-11	PNW VHF Conference - Wenatchee, WA; pnwvhfs.org
October 13	Club Meeting
October 18	SwaptoberFest - Rickreall, OR; swaptoberfest.com
November 3	Board Meeting
November 10	Club Meeting
November 15	East County Fox Hunt - MHCC - Fisheries Building 11am start
December 1	Board Meeting
December 8	Club Meeting
TBD - Dec.	Club POTA Party
TBD - Jan.	East County Fox Hunt - MHCC - Fisheries Building 11am start
Jan. 24-25	Winter Field Day - winterfeldday.org

For those of you that are looking for even more great reading about radio happenings in the Pacific Northwest – the PNW SOTA Newsletter is a great read. The newsletter is produced by Etienne K7ATN and a decade's worth of quarterly publications is available to read here: <http://www.pnwsota.org/content/pacific-northwest-sota-newsletters>

Upcoming Contests of General Interest
CQ World Wide DX - SSB October 25-26, 2025
North America SSB Sprint November 23, 2025
CQ World Wide DX - CW November 29-30, 2025
ARRL 10 Meter CW SSB Dig. (world wide) December 13-14, 2025
RAC (Canada) Winter Contest CW SSB - December 26-27, 2025
ARRL Kids Day January 4, 2026
ARRL RTTY Roundup January 4-5, 2026
ARRL January VHF Contest January 18-20, 2026
<i>see more at contestcalendar.com by WA7BNM</i>

Thank you to everyone who contributed to this quarter's newsletter, including – Dan N7CQR, Ken M. AI7LF, Bob W7JNM, Ken C. K7BXI, Denny WB7UFJ, Ylian KK7VZT, Max K7MAX, Pete W7PR, Wayne WA7NE and Sean KK7OVF.

Your PARC member articles and contributions are welcome and encouraged!